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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/057,754  | 01/23/2002  | Thomas G. Adelman    | 1005-007US01        | 9526             |
| 28863   | 7590        | 06/29/2004           | EXAMINER            |                  |
| SHUMAKER & SIEFFERT, P. A.<br>8425 SEASONS PARKWAY<br>SUITE 105<br>ST. PAUL, MN 55125 |             |                      | WEBB, SARAH K       |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 3731                |                  |

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/057,754

**Applicant(s)**

ADELMAN, THOMAS G.

**Examiner**

Sarah K Webb

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 12-23,28,29 and 32-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11,24-27,30 and 31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/9/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of Group I, Species I-a, II-d, in Paper No. 06/03/2004 is acknowledged.

### ***Claim Objections***

2. Claims 5 and 6 are objected to because of the following informalities: "the supporting structure" is recited in line 1, but it should be "securing structure" to follow with the language set forth in claim 1. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,894,843 to Benetti et al.

Benetti discloses a device in Figure 1 that can be connected to a retractor (column 7, line 64). The device includes a manipulator (1) that contacts an organ, a support shaft (3), and a securing structure (15). Benetti explains that the shaft is secured to the retractor by a ball joint (column 8, lines 22-34). A ball joint includes a ball, or "key member", coupled to the shaft that is received by a socket in the securing

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structure (15), and the rotation of the shaft is restricted by the key member engaging a latch (14) in the socket. The manipulator (1) can be shaped to contact the heart (column 7, line 11).

4. Claims 1-3,8,9, 24, and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,506,149 to Peng et al.

Peng illustrates a retractor in Figure 30 that includes an organ manipulating device (150), a support shaft (153), a key member (164) coupled to the support shaft, and a securing structure (165) with a socket. Peng explains that the socket includes a latch that engages the key member (164) to prevent movement of the shaft (153) relative to the securing structure (165) (column 22, lines 5-18). The support shaft (153) is flexible and comprises a vacuum tube (column 9, lines 13-14). Peng explains that the cup (151) is adapted for holding a heart (column 21, line 6).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4-7,10,11,25,27,30, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peng in view of US Patent No. 6,355,028 to Castaneda et al.

Peng includes a key member and socket structure, but fails to include structural limitations of the key member and socket as set forth in claims 4-7,10,11,25,27,30, and 31. Castaneda discloses another type of device that is used to stabilize instruments

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during heart surgery. Castaneda illustrates many different embodiments of a stabilization means between a shaft and a collar. In Figure 45, the shaft (1402) includes a key member (1420) with multiple protrusions extending radially from the central body. The collar (1428) includes a ledge and multiple walls (1460). The ledge prevents translational movement of the shaft, and the walls (1460) prevent rotational movement of the shaft (1402). The socket of the collar (1418) includes an aperture for passage of the shaft (1402). Regarding the limitation "integrally formed" of claim 11, Castaneda explains that the shaft can be glued to the disc, or "key member" (column 18, lines 65-67). The socket is capable of engaging the key member in more than one direction, as the protrusions have the same shape. Castaneda teaches that the structure of the key member and collar in Figure 45 provides a stabilization force to the key member (1420), thereby preventing movement of the shaft (1402) (column 20, lines 57-61). It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the ball joint of Peng with a key member and socket structure, as Castaneda teaches that this is an alternate way to provide a stabilization force to a shaft of an instrument used in heart surgery.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6,346,077 (Taylor et al.) discloses a manipulator device with various types of coupling mechanisms (esp. Figure 51B). US 6,387,047 (Duhaylongsod et al.) discloses a retractor assembly that includes a key member on a shaft that engages a socket in a collar (Figures 10-13).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah K Webb whose telephone number is (703) 605-1176. The examiner can normally be reached on Mon-Fri 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, McDermott or Shaver can be reached on (703) 308-0858. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SKW  
06/22/2004

SKW

  
DAVID O. REIP  
PRIMARY EXAMINER